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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/804,089
Filing Date: March 19, 2004
Appellant(s): ORTH ET AL.

Adesh Bhargava
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 10/2/07 appealing from the Office action mailed 1/11/07.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

US 2002/0028418	**Farag et al.**	**3-2002**
US 2001/0037304	**Paiz**	**11-2001**

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-14, 17-18 and 26 stand rejected under 35 U.S.C. 102(b) as being anticipated by US Publication No. 2002/0028418 to Farag et al. (herein after referred to as Farag); claims 15-16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Farag in view of US Publication No. 2001/0037304 to Paiz (herein after referred to as Paiz).

In regard to claim 1, Farag discloses the use of a database for the storage of dental data (paragraph 0038), said dental data being 3-D images of a patient's oral cavity in digitized form. The stored 3-D image comprises universally applicable dentition-specific and tooth-specific features, such as tooth family-specific features (for example, image 123 in Figure 8 is a representative 3-D image of a patient's dentition that shows the location and shape of various teeth). As to claim 2, the dental data are

associated with an actual person (paragraph 0038). As to claims 3 and 6, the dentition-specific and tooth-specific features comprise data representing number, position, character, and anomalies of teeth and their cooperation with each other (as shown by image 123, Figure 8). In re claims 4-5 and 7-8, Farag discloses producing a physical cast of the dentition-specific structure that is individualized to the patient (paragraph 0037). As to claim 9, additional data can be stored relating to dental design features (paragraph 0093). As to claim 10, the database is located directly on the premises (124, Figure 1) and can also be situated any place in the world and accessed by telecommunication means (paragraphs 0025/0029). As to claim 11, the database is equipped with an input unit (116) and an output unit (112). As to claim 12, the input unit comprises a keyboard (116), display means and a monitor (112) since the display means can be used to view what is being inputted by the keyboard. As to claim 13, the database is accessible by a user with the aid of input and display unit (paragraph 0027). As to claim 14, a computer program supports interaction between the input unit, display unit, and database (paragraphs 0026/0027). As to claims 17 and 18, the data of the database is used to construct a tooth model (paragraph 0095) and wherein the tooth model includes an outer surface specified by means of the data, wherein the data used for this purpose is taken from the database. In re claim 26, the database is used in a method (300) of conceiving the tooth model whose external shape is constructed from the data, said method comprising taking data from the data base and forming an image of a tooth model on display means (Figure 8), and with help of the image, input, and output devices, producing the model (Figure 3). Examiner notes that Applicant does not

positively claim a method of conceiving the tooth model. As a result, the content of the claim is considered as functional language, whereby statements of intended use and other functional statements do not impose any structural limitations on the claims distinguishable over the prior art of record. Similarly, Examiner notes that claims 13 and 15 are predominantly recitations of functional language and hence the examination of which follows the same guidelines outlined above.

With respect to claim 15, Farag discloses the database as previously described, but fails to disclose an exchange of data between the user and the operating terminal is only possible with the aid of a payment system. Paiz, however, teaches providing data to a user through a computer network system in exchange for payment (claim 11). Therefore, it would have been obvious to one having ordinary skill in the art at the time of Applicant's invention to make the exchange of data only possible with the aid of a payment system in order to control user access and collect payment for said access as taught by Paiz. As to claim 16, Farag discloses the computer program synthesizes new data from selected data (paragraph 0031).

(10) Response to Argument

Appellant's arguments are directed solely to the rejection of independent claim 1.

Appellant has admitted that the Farag reference discloses the storage of data and the illustration of digitized images of teeth (page 6, Appeal Brief). However, Appellant asserts that for Farag, "the storage of a 3-D image in association with patient information is merely of an administrative nature and leads to an electronic file." Examiner does not quite understand Appellant's argument as it relates to the language of claim 1 insofar as said claim is explicitly directed to a database for the storage of data – not to the way that such data is stored, retrieved and/or processed. Examiner notes that any electronic file – whether for administrative purposes or not – is still considered relevant data. In this case, Farag discloses the use of 3-D images of a patient's oral cavity, wherein said 3-D images represent the data that is stored in a database of patient records (paragraph 0038; Farag). As an aside, Examiner notes that although Applicant has not specifically claimed a computer database, Examiner has interpreted the claims to be representative of a computer database as opposed to a non-electronic database.

Appellant then remarks that "for the present invention, the specific features of the teeth are stored supplementary to the image. This information is in addition to the pure shape of the tooth" (page 7, Appeal Brief). However, Examiner points out that this disclosure was never interpreted as part of the scope of claim 1. Instead, as interpreted

by Examiner based on the claim language and the accompanying disclosure, the dental data stored in the database of claim 1 "illustrate real teeth as images in digitized form" (represented by the 3-D images of Farag), wherein "said digitized form also involves one of universally applicable dentition-specific features, tooth-specific features, and structural properties" (also represented by the 3-D images of Farag). Although Appellant admits that the 3-D image stored in the database of Farag does show specific features, "such features are not identified separately" (page 7, Appeal Brief). Again, Examiner contends that such a limitation is not claimed.

Appellant further argues that "Farag does not disclose a database with identified tooth-specific structures, but only discloses storage of 3-D images" (page 7, Appeal Brief). Examiner points out that the claimed tooth-specific and dentition-specific features are described in Applicant's specification (pages 16-17) as structural features associated with each individual tooth and/or dentition. From this description, it is Examiner's understanding that a 3-D image (i.e. dentition 123 in Figure 8 of Farag) shows structural features such as tooth family-specific characteristics (i.e. the shape of each cuspid, molar, incisor, etc.). Examiner additionally remarks that "identified" tooth-specific structures were never claimed as representative of the data stored in the database. As understood by Examiner and pointed out above, the dental data set forth in claim 1 is represented by images of teeth in digitized form. Appellant claims that said digitized form involves one of dentition-specific features, tooth-specific features, and structural properties. However, the claim does not require the data to include "identified

tooth-specific structures." Instead, Examiner notes that any number of tooth-specific features can be ascertained directly from the 3-D image of Farag. For example, Appellant claims that said features include at least one sex-specific, tooth family-specific, biography-specific, and person-specific characteristics. It is the Examiner's position that the 3-D image of the patient's oral cavity stored in the database of Farag includes these characteristics – for example, an examination of said image would yield tooth family-specific characteristics (such as the shape and location of each molar, cuspid, incisor, etc.). Furthermore, paragraph 0038 of Farag teaches that the aforementioned 3-D image is stored in association with patient information (i.e. said image along with the name of the patient), wherein this combination of stored data is representative of the claimed "person-specific characteristics."

Lastly, Appellant points out a particular advantage of using the database of the present invention - namely it is advantageous for a user of the database to have the data available on his own data processing facilities so as to minimize reaction times and processing times. Appellant argues that "Farag discloses a general database with the data of a person's tooth, Farag however does not teach or suggest the aforementioned advantages of using a database" (page 7, Appeal Brief). However, Examiner maintains that a proper rejection under 35 U.S.C. 102(b) does not require the anticipatory reference to disclose such advantages as long as every element of the claim is taught.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Jonathan Werner

Jonathan Werner

12/12/07

Conferees:

Cris Rodriguez

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